

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently amended) A method in a data processing system for dynamically selecting software buffers for aggregation in order to optimize system performance, said method comprising:
receiving data to be transferred to a device, said data being stored in a chain of software buffers;
determining current characteristics of said system; ~~[[and]]~~
dynamically selecting ones of said software buffers to combine that will maximize performance of said system while said data is being transferred~~[[.]]~~;
determining a threshold that has been assigned to an I/O adapter that is to be used to receive said data;
evaluating a first buffer in said chain;
determining whether said first buffer is larger than said threshold;
in response to a determination that said first buffer is larger than said threshold, leaving said first buffer unchanged and creating a new chain of buffers that includes said unchanged first buffer; and
in response to a determination that said first buffer is not larger than said threshold, combining said first buffer with a second buffer in said chain to create a new buffer that is a combination of said first buffer and said second buffer, and creating a new chain of buffers that includes said new buffer instead of either said first or said second buffer.
2. (Currently amended) The method according to claim 1, ~~wherein further comprising the steps of:~~
determining current characteristics of said system includes ~~including~~ determining direct memory access (DMA) capabilities and processor capacity of said system, wherein said DMA capabilities and ~~processor~~ ~~process~~ capacity are said current characteristics.
3. (Currently amended) The method according to claim 1, further comprising the step ~~[[steps]]~~ of:
generating said ~~[[a]]~~ new chain of buffers that includes an aggregation of said selected ones of said software buffers.
4. (Currently amended) The method according to claim 1, further comprising the step ~~[[steps]]~~ of:
setting said ~~[[a]]~~ threshold for each combination of I/O adapter, slot size, and system characteristics.

5-6. (Canceled)

7. (Currently amended) The method according to claim 1 [[6]], further comprising the step [[steps]] of:

transmitting said data using said new chain instead of said chain.

8-20. (Canceled)

21. (Currently amended) ~~The method according to claim 1, further comprising:~~

A method in a data processing system for dynamically selecting software buffers for aggregation in order to optimize system performance, said method comprising:

receiving data to be transferred to a device, said data being stored in a chain of software buffers;

determining current characteristics of said system;

dynamically selecting ones of said software buffers to combine that will maximize performance of said system while said data is being transferred;

determining a threshold that has been assigned to an I/O adapter that is to be used to receive said data;

evaluating a first buffer in said chain;

determining whether said first buffer is larger than said threshold;

in response to a determination that said first buffer is larger than said threshold, leaving said first buffer unchanged; and

in response to a determination that said first buffer is not larger than said threshold, replacing said first and said second buffers in said chain with an aggregated buffer which is a combination of said first and said second buffers.